

PATENT



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Filing Date: 06/19/2001 Art Unit: 2673
10 Serial No.: 09/681,855 Docket No.: PMXP0107USA

Title: POINTING DEVICE WITH A ROLLABLE DEVICE AND LIGHT
SOURCE

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To: Assistant Commissioner for Patents
Washington, D.C. 20231

APR 15 2003

Technology Center 2600

Subject: Information disclosure statement Under
20 37C.F.R. §1.56.

Dear Sir/Madam:

25 This is an Information Disclosure Statement in accordance
with the duty to disclose information material to
patentability under 37 C.F.R. §1.56. Applicant wishes to make
of record each of the documents listed on the accompanying
form PTO/SB/08. It is respectfully requested that the examiner
initials the cited reference on the form and that it be made
30 of record in the application and that a copy of the initialed
form be sent to the applicant with the next communication from
the examiner.

35 Since the IDS is filed before the mailing date of a first
Office action on the merits, consideration of the information
disclosure statement is hereby requested according to

37C.F.R. §1.97(b). The prior art patents contained in the information disclosure statement were cited in communications from the China Intellectual Property Office on Jan. 17, 2003. Applicant sincerely hopes that the examiner can consider the
5 items contained in the information disclosure statement.

According to the requirement set forth in 37C.F.R. §1.98 and M.P.E.P. 609 (8th edition, Aug. 2001), the applicant is submitting copies of the cited reference (China Patent No.
10 CN1160244A, CN2377611Y, CN1157435A, and Japan Patent No. JP11122294A) and a concise explanation of the relevance in this application hereinafter.

China Patent No. CN1160244A provides a cursor control
15 device comprising a cursor control unit 1 electrically connected to a computer, a control interface 11 for generating a control signal corresponding to the operation of a user, a controller 12 electrically connected to the control interface 11 for receiving the control signal, and a alerting
20 device 13 electrically connected to the controller 12 for generating an alerting signal to alert the user. The cursor control device further comprises a detecting device 2 for generating a signal to the controller 12 depending on how long the cursor on the screen has been moved or how long the control
25 interface 11 has been operated (refer to Fig.1). When the detecting device 2 generates the signal to the controller 12, the controller 12 also generates a corresponding signal to the alerting device 13. The alerting device 13 will generate the alerting signal, which can be an illumination of an LED
30 23 installed between the user's fingers (refer to Fig.2), to alert the user. Thus, the user will be reminded to take a break after operating the cursor control device for a time.

China Patent No. CN2377611Y provides a pointing device
35 comprising a housing 14, a wheel 12, a plurality of narrow openings 16 on the wheel 12, a emitter fixed on one side of

the wheel 12 for emitting light through the plurality of narrow openings 16, and a sensor opposite the emitter and fixed on the other side of the wheel 12 for receiving the light emitted from the emitter (refer to Fig.1 to Fig.3, the emitter and sensor are not shown in these figures). The purpose of this invention is to detect the rotation of the wheel 12 without connecting with an optical decoder.

China Patent No. CN1157435A provides a mouse with a button. When a user wants to scroll a window of a computer, all he/she needs to do is depress the button and move the mouse simultaneously. The speed of scrolling depends on how fast the mouse is moved. The purpose of this invention is to solve the problem that the mouse cannot position a cursor accurately as it becomes older and wears out.

Japan Patent No. JP11122294A provides an automatic call receiving display system for electronic mail (e-mail). The system comprises a computer 2a connected to a provider 3 via Internet 1 (2b and 2c in Fig.1 also represent personal computers) and a receiving box 5a connected to the computer 2a (5b and 5c in Fig.1 also represent receiving boxes). The receiving box 5a comprises a liquid crystal display panel 6, an operating portion 7, a display lamp 8, a number display device 10, a memory card socket 11 that can receive a memory card, a CPU 13, and a detector 20 (refer to Fig.2 and Fig.3). The display lamp 8 is switched on if a corresponding e-mail to the computer 2a is received by the receiving box 5a. And, the memory card stores the e-mail received. Even if the computer 2a is not connected to the provider 3, electronic mail can be received and stored via the receiving box 5a.

According to the present invention, what is claimed is:

1. A pointing device electrically connected to a computer for controlling movements of a cursor on a display device of the

computer, **the pointing device** comprising:

a housing;

a pointing unit installed inside the housing for generating pointing signals to control movements of the cursor;

5 a rollable device for generating rolling signals;

a light source for illuminating the rollable device; and

a control unit for controlling the pointing device;

wherein when the computer transmits a state signal to the pointing device, the control unit controls the light source

10 to determine an illumination mode of the rollable device according to the state signal.

Compared with CN1160244A, CN2377611Y, CN1157435A, and JP11122294A individually, the present invention provides a pointing device 10 comprising a housing 12, a pointing unit 14 installed inside the housing 12 for generating pointing signals to control movements of a cursor 42, a rollable device 16 for generating rolling signals, **a light source 22 for illuminating the rollable device 16**, and a control unit 24 for controlling the pointing device 10 (refer to Fig.1 to Fig.3). When a driver 32 detects a current computer state, for example that the computer 30 receives an e-mail from the Internet, it will send a corresponding state signal to the pointing device 10 to make the control unit 24 control the light source 22 to emit light or flash light according to the state signal (specification, paragraph [0024]). Because **the rollable device 16 is a rolling wheel made of a transparent material** (specification, paragraph [0018], lines 2 to 3), **the rollable device 16 will present a predetermined illumination mode when it reflects light from the light source 22 (refer to Fig.3 to Fig.6)**. Therefore, a user can learn the current computer state from the predetermined illumination mode

realized with the rollable device 16.

Because none of the prior art patents disclose **a pointing device with a light source for illuminating a rollable device**,
5 it is therefore maintained that claim 1 of the present invention is substantially different from the teachings disclosed in CN1160244A, CN2377611Y, CN1157435A, and JP11122294A.

10 According to the present invention, what is claimed is:

23. A pointing device adapted to electrically connect to a computer for controlling movements of a cursor on a display device of the computer, **the pointing device** comprising:
15 a housing;
a pointing unit installed inside the housing for generating pointing signals adapted to control movements of the cursor;
a rolling wheel for generating rolling signals; and
20 **a light source for providing light to illuminate the rolling wheel.**

Claim 23 is similar to claim 1 and also comprises the identical limitation of **a pointing device with a light source**
25 **for illuminating a rollable device**. Because none of the prior art patents disclose **a pointing device with a light source for illuminating a rollable device**, it is therefore maintained that claim 23 of the present invention is substantially different from the teachings disclosed in CN1160244A,
30 CN2377611Y, CN1157435A, and JP11122294A.

Since the prior art patents CN1160244A, CN2377611Y, CN1157435A, and JP11122294A are substantially different from claim 1 and claim 23 of the present application, and all other
35 claims are dependent on claim 1 and claim 23, a quick allowance

of the present application is sincerely requested.

5

Respectfully Submitted,

Winston Hsu

Date:

4/17/2007

Winston Hsu, Patent Agent No. 41,526

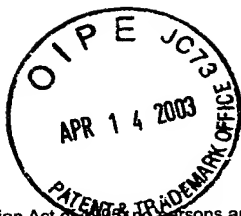
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PTO/SB/21 (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Application Number	09/681,855
Filing Date	06/19/2001
First Named Inventor	Ding Jong Wang
Group Art Unit	2673
Examiner Name	
Attorney Docket Number	PMXP0107USA

Total Number of Pages in This Submission 46

ENCLOSURES (check all that apply)

- ☒ Fee Transmittal Form
- ☐ Fee Attached
- ☐ Amendment / Reply
- ☐ After Final
- ☐ Affidavits/declaration(s)
- ☐ Extension of Time Request
- ☐ Express Abandonment Request
- ☒ Information Disclosure Statement
- ☐ Certified Copy of Priority Document(s)
- ☐ Response to Missing Parts/ Incomplete Application
- ☐ Response to Missing Parts under 37 CFR 1.52 or 1.53

- ☐ Assignment Papers (for an Application)
- ☐ Drawing(s)
- ☐ Licensing-related Papers
- ☐ Petition
- ☐ Petition to Convert to a Provisional Application
- ☐ Power of Attorney, Revocation Change of Correspondence Address
- ☐ Terminal Disclaimer
- ☐ Request for Refund
- ☐ CD, Number of CD(s) _____

- ☐ After Allowance Communication to Group
- ☐ Appeal Communication to Board of Appeals and Interferences
- ☐ Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
- ☐ Proprietary Information
- ☐ Status Letter
- ☐ Other Enclosure(s) (please identify below):

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Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm
or
Individual name

WINSTON HSU

Signature

Winston Hsu

Date

4/11/2003

CERTIFICATE OF MAILING

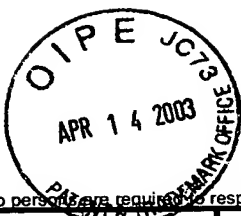
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Date

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Approved for use through 04/30/2003. OMB 0651-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

FEE TRANSMITTAL for FY 2003

Effective 01/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 0.00

Complete if Known

Application Number 09/681,855
Filing Date 06/19/2001
First Named Inventor Ding Jong Wang
Examiner Name
Art Unit 2673
Attorney Docket No. PMXP0107USA

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METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number 50-0801

Deposit Account Name North America International Patent Office

The Commissioner is authorized to: (check all that apply)

☒ Charge fee(s) indicated below ☐ Credit any overpayments

☒ Charge any additional fee(s) during the pendency of this application

☐ Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description	Fee Paid
1001 750	2001 375	Utility filing fee	
1002 330	2002 165	Design filing fee	
1003 520	2003 260	Plant filing fee	
1004 750	2004 375	Reissue filing fee	
1005 160	2005 80	Provisional filing fee	
SUBTOTAL (1)			(\$) 0.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims	Fee from below	Fee Paid
Total Claims	-20** =	X	
Independent Claims	-3** =	X	
Multiple Dependent			

Large Entity Fee Code (\$)	Small Entity Fee Code (\$)	Fee Description
1202 18	2202 9	Claims in excess of 20
1201 84	2201 42	Independent claims in excess of 3
1203 280	2203 140	Multiple dependent claim, if not paid
1204 84	2204 42	** Reissue independent claims over original patent
1205 18	2205 9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$) 0.00

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Small Entity

Fee Code (\$)	Fee Code (\$)	Fee Description	Fee Paid
1051 130	2051 65	Surcharge - late filing fee or oath	
1052 50	2052 25	Surcharge - late provisional filing fee or cover sheet	
1053 130	2053 130	Non-English specification	
1812 2,520	1812 2,520	For filing a request for <i>ex parte</i> reexamination	
1804 920*	1804 920*	Requesting publication of SIR prior to Examiner action	
1805 1,840*	1805 1,840*	Requesting publication of SIR after Examiner action	
1251 110	2251 55	Extension for reply within first month	
1252 410	2252 205	Extension for reply within second month	
1253 930	2253 465	Extension for reply within third month	
1254 1,450	2254 725	Extension for reply within fourth month	
1255 1,970	2255 985	Extension for reply within fifth month	
1401 320	2401 160	Notice of Appeal	
1402 320	2402 160	Filing a brief in support of an appeal	
1403 280	2403 140	Request for oral hearing	
1451 1,510	1451 1,510	Petition to institute a public use proceeding	
1452 110	2452 55	Petition to revive - unavoidable	
1453 1,300	2453 650	Petition to revive - unintentional	
1501 1,300	2501 650	Utility issue fee (or reissue)	
1502 470	2502 235	Design issue fee	
1503 630	2503 315	Plant issue fee	
1460 130	1460 130	Petitions to the Commissioner	
1807 50	1807 50	Processing fee under 37 CFR 1.17(q)	
1806 180	1806 180	Submission of Information Disclosure Stmt	
8021 40	8021 40	Recording each patent assignment per property (times number of properties)	
1809 750	2809 375	Filing a submission after final rejection (37 CFR 1.129(a))	
1810 750	2810 375	For each additional invention to be examined (37 CFR 1.129(b))	
1801 750	2801 375	Request for Continued Examination (RCE)	
1802 900	1802 900	Request for expedited examination of a design application	

Other fee (specify)

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 0.00

SUBMITTED BY

Name (Print/Type) Winston Hsu
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Signature *Winston Hsu*
Date 4/11/2003

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